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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,406	08/30/2001	Sai Fai Chan	P/3987-6	8251

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EXAMINER

CREPEAU, JONATHAN

ART UNIT PAPER NUMBER

1746

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,406

Applicant(s)

CHAN, SAI FAI

Examiner

Jonathan S. Crepeau

Art Unit

1746

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-9, 2-21-3, 8-30-1.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Suggestions

1. Claims 12 and 28, which recite that the battery contact is “shaped,” do not appear to meaningfully limit their respective parent claims. Correction or clarification is suggested. In claim 17, it is suggested that “retention leg” be changed to “restraining leg.”

Claim Objections

2. In claim 31, line 3, “thought” should be changed to “through.” Correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 21-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 recites that the “restraining leg is non-linear.” However, parent claim 20 recites that the “restraining leg is straight.” In the event that that the restraining leg of claim 20 is *entirely* straight, then the embodiments of claims 20 and 21 are mutually exclusive. Correction or clarification is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-12 and 14-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Holden (U.S. Patent 4,545,639). Regarding claims 1 and 15, the reference teaches a battery holder comprising a contact (see Figs. 1 and 2). The contact comprises a torsional region (54), a restraining leg (68, 66) extending from one end of the torsional region, and a battery terminal contact region (74) extending from the other end of the torsional region (see Fig. 2). Regarding claims 1, 2, 14 18, and 29, the battery terminal contact region is torsionally and resiliently rotatable relative to the restraining leg. Regarding claims 3, 4, 19, and 20, the restraining leg is straight in its end portion (66). Regarding claims 5, 6, 21, and 22, the restraining leg also has a non-linear bend portion (68). Regarding claims 7, 8, 23, and 24, the restraining leg is capable of functioning as a battery terminal contact point or a PCB terminal contact point. Regarding claims 9, 10, 25, and 26, the battery terminal contact region (74) is non-linear and includes a bend (82) (see Fig. 1). Regarding claims 11 and 27, the battery contact region includes a straight section (86) extending from the torsional region and a curved section (82) intermediate the straight section and the distal end (88) of the wire (see Figs. 1 and 2). Regarding claims 12 and 28, the battery contact is "shaped." Regarding claim 14, the battery terminal contact region and the restraining leg extend transverse from the torsional region. Regarding claim 16, the

restraining leg is located against a region of the battery receiving member (34) (see Figs. 1 and 2). Regarding claim 17, the restraining leg and the battery contact region each include a distal end of the wire. Regarding claim 30, the transitions between the torsional region and the restraining leg and the torsional region and the battery contact region are defined by bends (56, 57) (see Fig. 2).

Thus, the instant claims are anticipated.

7. Claims 1-4, 7-12 and 14-20 are rejected under 35 U.S.C. 102(a) as being anticipated by JP 2000-348699. Regarding claims 1 and 15, the reference teaches a battery holder comprising a contact (4) (see Fig 3). The contact comprises a torsional region (4c), a restraining leg (4b) extending from one end of the torsional region, and a battery terminal contact region (4a) extending from the other end of the torsional region (see Fig. 2). Regarding claims 1, 2, 14, and 18, the battery terminal contact region is torsionally and resiliently rotatable relative to the restraining leg. Regarding claims 3, 4, 19, and 20, the restraining leg is straight. Regarding claims 7 and 8, the restraining leg is capable of functioning as a battery terminal contact point or a PCB terminal contact point. Regarding claims 9 and 10, the battery terminal contact region is non-linear and includes a bend (see Fig. 2). Regarding claim 11, the battery contact region includes a straight section extending from the torsional region and a curved section intermediate the straight section and the distal end (4c) of the wire (see Fig. 2). Regarding claim 12, the battery contact is "shaped." Regarding claim 14, the battery terminal contact region and the restraining leg extend transverse from the torsional region. Regarding claim 16, the restraining

leg is located against a region of the battery receiving member (5) (see Fig. 3). Regarding claim 17, the restraining leg and the battery contact region each include a distal end of the wire.

Thus, the instant claims are anticipated.

8. Claims 1-4, 7-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 6-104041. Regarding claim 1, the reference teaches an electrical contact (54) (see Fig 9). The contact comprises a torsional region (54a), a restraining leg extending from one end of the torsional region, and a contact region (54b) capable of contacting a battery terminal extending from the other end of the torsional region (see Fig. 9). Regarding claims 1 and 2, the battery terminal contact region is torsionally and resiliently rotatable relative to the restraining leg. Regarding claims 3 and 4, the restraining leg is straight. Regarding claims 7 and 8, the restraining leg is capable of functioning as a battery terminal contact point or a PCB terminal contact point. Regarding claims 9 and 10, the battery terminal contact region is non-linear and includes a bend (see Fig. 9). Regarding claim 11, the battery contact region includes a straight section extending from the torsional region and a curved section intermediate the straight section and the distal end of the wire (see Fig. 9). Regarding claim 12, the contact is "shaped." Regarding claim 14, the battery terminal contact region and the restraining leg extend transverse from the torsional region.

Thus, the instant claims are anticipated.

9. Claims 1-12 and 14-30 are rejected under 35 U.S.C. 102(a) as being anticipated by JP 2001-84979. Regarding claims 1 and 15, the reference teaches a battery holder comprising a contact (1) (see Figs. 1 and 3). The contact comprises a torsional region (3), a restraining leg (4) extending from one end of the torsional region, and a battery terminal contact region (2) extending from the other end of the torsional region (see Fig. 1). Regarding claims 1, 2, 14 18, and 29, the battery terminal contact region is torsionally and resiliently rotatable relative to the restraining leg. Regarding claims 3, 4, 19, and 20, the restraining leg is straight in the portion adjacent the torsional region. Regarding claims 5, 6, 21, and 22, the restraining leg also has a non-linear bend portion (7a). Regarding claims 7, 8, 23, and 24, the restraining leg is capable of functioning as a battery terminal contact point (7a) or a PCB terminal contact point. Regarding claims 9, 10, 25, and 26, the battery terminal contact region is non-linear and includes a bend (see Fig. 1). Regarding claims 11 and 27, the battery contact region (2) includes a straight section extending from the torsional region and a curved section intermediate the straight section and the distal end of the wire (see Fig. 1). Regarding claims 12 and 28, the battery contact is "shaped." Regarding claim 14, the battery terminal contact region and the restraining leg extend transverse from the torsional region. Regarding claim 16, the restraining leg is located against a region of the battery receiving member (8) (see Fig. 4). Regarding claim 17, the restraining leg and the battery contact region each include a distal end of the wire. Regarding claim 30, the transitions between the torsional region and the restraining leg and the torsional region and the battery contact region are defined by bends (see Fig. 1).

Thus, the instant claims are anticipated.

10. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 9-120807. Regarding claim 1, the reference teaches a battery contact (9) (see Fig 8). The contact comprises a torsional region (9b), a restraining leg extending from one end of the torsional region (9c), and a battery terminal contact region (9a) extending from the other end of the torsional region (see Fig. 8). Regarding claims 1 and 2, the battery terminal contact region is torsionally and resiliently rotatable relative to the restraining leg. Regarding claims 3 and 4, the restraining leg is straight. Regarding claims 5 and 6, the restraining leg is also non-linear and includes a bend. Regarding claims 7 and 8, the restraining leg is capable of functioning as a battery terminal contact point or a PCB terminal contact point. Regarding claims 9 and 10, the battery terminal contact region is non-linear and includes a bend (see Fig. 8). Regarding claim 11, the battery contact region includes a straight section extending from the torsional region and a curved section intermediate the straight section and the distal end of the wire (see Fig. 8). Regarding claim 12, the contact is "shaped." Regarding claim 14, the battery terminal contact region and the restraining leg extend transverse from the torsional region. Regarding claim 13, the torsional region is straight.

Thus, the instant claims are anticipated.

11. Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Saida (U.S. Patent 5,607,795). Regarding claims 1 and 15, the reference teaches a battery holder comprising a contact (3) (see Fig. 1). The contact comprises a torsional region (i.e., the flat section at the top

Art Unit: 1746

of the "M" shape), a restraining leg (33) extending from one end of the torsional region, and a battery terminal contact region (31) extending from the other end of the torsional region (see Fig. 1). Regarding claims 1, 2, 14 18, and 29, the battery terminal contact region is torsionally and resiliently rotatable relative to the restraining leg. Regarding claims 3, 4, 19, and 20, the restraining leg has a straight portion (33). Regarding claims 5, 6, 21, and 22, the restraining leg also has a non-linear bend portion (see Fig. 1). Regarding claims 7, 8, 23, and 24, the restraining leg is capable of functioning as a battery terminal contact point and a PCB terminal contact point (see col. 3, line 38). Regarding claims 9, 10, 25, and 26, the battery terminal contact region is non-linear and includes a bend (i.e., the dip in the "M" shape) (see Fig. 1). Regarding claims 11 and 27, the battery contact region includes a straight section extending from the torsional region and a curved section intermediate the straight section and the distal end of the wire (see Fig. 1). Regarding claims 12 and 28, the battery contact is "shaped." Regarding claims 14 and 34, the battery terminal contact region and the restraining leg extend transverse from the torsional region. Regarding claim 16, the restraining leg is located against a region of the battery receiving member (21) (see Fig. 2A). Regarding claim 17, the restraining leg and the battery contact region each include a distal end of the wire. Regarding claim 30, the transitions between the torsional region and the restraining leg and the torsional region and the battery contact region are defined by bends (see Fig. 1). Regarding claims 13 and 33, the torsional region is straight. Regarding claim 31, the battery contact region protrudes through a hole (22) in the wall of the battery holder (see Fig. 1). Regarding claim 32, the torsional region and the restraining leg are translationally fixed relative to the holder and the terminal contact region is rotationally displaceable relative to the holder.

Art Unit: 1746

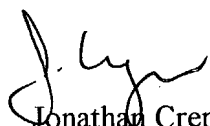
Thus, the instant claims are anticipated.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299.

The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached at (571) 272-1302. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.



Jonathan Crepeau
Patent Examiner
Art Unit 1746
March 8, 2004